# MODIS TECHNICAL TEAM MEETING

# January 19, 1995

The MODIS Technical Team Meeting was chaired by Vince Salomonson. Present were Barbara Conboy, Locke Stuart, Bruce Guenther, Dick Weber, Joann Harnden, Al Fleig, Barbara Putney, John Bauernschub, Ed Masuoka, Dorothy Hall, David Herring, Rosemary Vail, John Barker, Steve Ungar, and Wayne Esaias.

#### 1.0 SCHEDULE OF EVENTS

Jan. 15	Semi-annual reports due to Barbara Conboy
Feb. 20	MODIS Ocean Discipline Group Meeting, in Miami, FL
Feb. 21 - 24	Workshop on international Calibration/Validation Efforts
	for EOS Ocean Color Sensors, in Miami, FL
May 2	MODIS Calibration Working Group (tentative)
May 3 - 5	MODIS Science Team Meeting (tentative)

## 2.0 MINUTES OF THE MEETING

### 2.1 MODIS Project Reports

Weber showed the Team a picture of the MODIS Engineering Model (EM) that was taken last week at SBRC. Weber reported that Bill Barnes, Ed Knight, and Gene Waluschka are at SBRC observing their polarization and scattered light tests. Weber is planning to travel to SBRC in 2 weeks to review the MODIS EM detectors.

Salomonson asked if any conclusions have been reached by MODIS Project regarding SBRC's request to relax the specs for MODIS Bands 21 - 24. Weber responded negatively because Knight is still exploring the issue.

Fleig asked who at SBRC he should contact if he has questions regarding EM test data. Guenther responded that we first ask our own people if we know the answers before we approach SBRC. A principal MCST contact on the test data is Tim Zukowski of Swales; Knight and Barnes are also contacts at GSFC.

Fleig added that Drs. Qiu and Waluschka are making good progress on their analyses of the MODIS ghosting problem. Weber stated that he would like to meet with Qiu and Waluschka. It was agreed that Barker would arrange the meeting to include: himself, Gerry Godden, Weber, Qiu, Waluschka, and Fleig.

# 2.1.1 Test Analysis Controller (TAC) Software

Guenther reported that the first beta delivery of the TAC software has arrived at GSFC, and that Knight will also bring some of the software with him when he returns.

# 2.2 MCST Reports

Guenther reported that SBRC has completed their polarization tests. Visual analysis indicates that at nadir the model is being reproduced, which means that the instrument meets the polarization specification. SBRC has also conducted scan angle variation tests, the results of which will be sent to GSFC via ftp (file transfer protocol) on Friday. Next week, MCST will begin processing the EM test data.

Guenther announced that the MCST paper describing the use of onboard calibrators on MODIS will be sent next week to Carol Bruegge. The paper will appear in the *Journal of Atmospheric and Oceanic Technology*.

Guenther stated that MCST is close to completing the transition to the new support contractor. He feels that the recent 4-day internal workshop went well and is considering holding an internal review annually.

# 2.3 SDST Reports

Masuoka introduced Barbara Putney, who has joined the SDST and is overseeing the integration of MODIS land and atmosphere algorithms. Previously, Putney was the Science Software Manager for the ESDIS Project with responsibility for overseeing the development and integration of the science processing software for all instruments.

Masuoka is working on refining the processing scenarios that were produced at the Ad Hoc Working Group modeling workshop.

# 2.3.1 MODIS Browse Product

MODIS will need to provide the ESDIS Project with their plans for producing browse products for the MODIS data products. SDST will collect input from the Science Team regarding what will serve as browse for a given product.

Esaias stated that the Ocean Discipline Group needs a browse product to let them know if clouds are present in a particular scene, and what resolution the view is at. In short, the Ocean Group will only need a low resolution browse product and, since it comes out of MODIS' processing allocation, will probably want the simplest browse product possible.

Barker added that the Team may want to be able to browse temporally, spatially, and spectrally.

# 2.3.2 Lunar View Discussions

Fleig told the Team that Piers Sellers wants input from prior to the Feb. 28 SWAMP Meeting on requirements for lunar viewing capabilities. Salomonson responded that he is awaiting the report from MCST on MODIS' lunar view requirements before making a decision.

Weber cautioned that it is unlikely that the EOS Program Office will accept a requirement for a complete spacecraft flip in order to view the moon. Moreover, other EOS instrument teams may object to such a maneuver. Weber feels that a small roll may be acceptable.

# 2.3.3 Request for AVHRR Data

Salomonson requested SDST to obtain some AVHRR data gridded in the ISCCP grid.

#### 2.4 MODIS Electronic Bulletin Board

Regarding Yoram Kaufman's suggestion at the last MODIS Technical Team Meeting to establish an electronic MODIS bulletin board, Herring summarized the recent MAST Meeting on the subject. MAST agreed that it could expand the MODIS Home Page to include updated information on issues of interest to the Team; such as upcoming events and meetings, forthcoming MODIS-related papers or publications, deadlines and milestones, etc.

After brief discussion, it was determined that the MODIS Home Page will include the MODIS Science Team Minutes (which are already available on WWW) and a list of MODIS-related publications and articles. Other information, such as a calendar of events, will remain accessible via these Technical Team Minutes or e-mail notification.

### 3.0 ACTION ITEMS

1. Fleig: obtain some AVHRR data gridded in the ISCCP grid and forward them to the MODIS Team Leader.

#### 3.1 Action Items Carried Forward

- 2. Weber: Work with SBRC to obtain MODIS test data. [Test data are forthcoming from SBRC.]
- 3. *MODIS Team*: Determine how, given the MODIS bowtie effect, MODIS images will be produced at launch. [This may be a suitable topic for discussion at the next Science Team Meeting.]
- 4. Fleig and Ungar: Interact with the group leaders prior to developing a MODIS data simulation plan for review at the next Science Team Meeting. [Work on this item is still in progress.]

# 3.2 Closed Action Items

- 1. Herring and Stuart: Discuss the logistics and resources required to establish an electronic MODIS Bulletin Board on the WWW, or another dissemination vehicle. [see Section 2.4 above.]
- 2. Herring: Interact with the MODIS Team to update the EOS Reference Handbook. [Corrections were forwarded to Renny Greenstone.]

## **4.0 RECENT MODIS DOCUMENTS**

Note: All recent MODIS documents are maintained in MODARCH. If you would like access to or information about MODARCH, please contact the MODARCH System Administrator, Michael Heney, at (301) 286-4044 or via e-mail at mheney@ltpmail.gsfc.nasa.gov.

- 1. Ocean Group's Productivity Algorithm Workshop Report, by MOCEAN.
- 2. Suggestions for Calibration Coefficient Generation, by Phil Slater and Stuart Biggar
- 3. The Earth Observing System, by Michael D. King, David D. Herring, and David J. Diner
- 4. MODIS Level 1B Calibration ATBD, by MCST
- 5. Lunar Viewing Opportunities from the MODIS Space Viewport, by Brij Gambhir and Jack Shumaker